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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matters of

CC Docket No. 98-147

and

CC Docket No. 96-98

**Helen E. Disenhaus  
Patrick J. Donovan  
Swidler Berlin Shereff Friedman, LLP  
3000 K Street, N.W. - Suite 300  
Washington, D.C. 20007  
(202) 424-7500**

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## SUMMARY

Introduction. Mpower urges the Commission to view its role in this proceeding as ensuring that the conditions are in place that will permit CLECs to achieve the pro-competitive goals of the Act. In a fully competitive marketplace, the situation of CLECs would be like that of the initial inventors of the PC, with unlimited opportunities in an unregulated marketplace. The reality is, however, that CLECs do not have such unlimited opportunities because ILECs, through their control of essential facilities and ability to price anticompetitively, are able to control the scope and pace of competition. The Commission in this proceeding should establish measures that will assure that CLECs have the necessary competitive space, figuratively and literally, to grow and meet the needs of consumers, by curtailing ILEC efforts to thwart CLEC collocation. The Commission may wish to take guidance from Qwest Corporation's recent initiative to provide more reasonable terms for interconnection with CLECs. Qwest's initiative affirms Mpower's position on several issues raised in this proceeding, as further discussed herein.

Complete Parity in Collocation Should be Required. This proceeding provides the Commission an opportunity to promote the pro-competitive goals of the Act by establishing a regulatory framework that will assure that ILECs permit physical collocation of equipment necessary for interconnection and access to unbundled networks on terms and conditions that are reasonable and nondiscriminatory. So far, since passage of the Telecommunications Act of 1996, the Commission has not fully embraced its authority under Section 251(c)(6) to assure that CLECs are afforded reasonable and nondiscriminatory collocation. The Commission should now do so and establish rules that will provide CLECs full parity in terms of access to,

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and use of, ILEC central offices. The nondiscrimination provision of Section 251(c)(6) requires no less.

A Full-Range of Contemporary Equipment May Be Collocated. For the reasons explained in these comments, the Commission may permit CLECs to collocate a full range of contemporary telecommunications equipment on ILEC premises, including multifunction equipment. The Commission must do so in order to assure that the benefits of local telecommunications competition are achieved.

“Necessary” Means “Necessary for Competitive Interconnection.” The Commission has considerable discretion under section 251(c)(6) in defining “necessary” because Congress did not define this term in the Act. For all practical purposes, the Commission should read “necessary” as meaning necessary to achieve the manifest goals of the Act -- effective competition in local telecommunications services markets. Congress intended that CLECs be permitted to collocate equipment necessary to enable them effectively to compete with ILECs. The Commission should interpret “necessary” in this way in order to promote the goals of the Act.

Equipment Is “Necessary” That “Enables” Interconnection or Access to UNEs. More concretely, the Commission should define “equipment necessary for interconnection or access to UNEs” as encompassing any equipment that “enables” competitive interconnection or access to UNEs. The Commission should recognize that the meaning of necessary must accommodate changes in technology and market forces. The purpose of the Act is to promote competition, which could not be achieved if Congress had intended the scope of CLEC collocation rights to be defined once, and then frozen at the technology level then existing. Rather, as more

functionality is included in loops, additional functionality in CLEC equipment is necessary for interconnection and access to UNEs. In this regard, the Commission should determine that the functions performed by contemporary equipment that interacts with packetized information, such as ATM “switches” and routers, are not “switching functions” that ILECs can classify as separate from interconnection and access to UNEs and, therefore, not eligible for collocation. As will be explained in these comments, the functionalities of ATM switches and routers are legally “necessary” for interconnection. Therefore, multifunction equipment may be collocated on a stand-alone basis in ILEC central offices. Collocation of this type of equipment is also necessary because the economic barriers that would be established by requiring CLECs to establish separate offices for this equipment, in addition to collocation space, would thwart achievement of the competitive goals of the Act. Mpower is encouraged by Qwest’s recent announcement that it will permit collocation of ATM and packet switching equipment. The Commission should require all ILECs to do the same.

Multifunction Equipment May Be Collocated. Furthermore, even if equipment that is commercially available and that is capable of interconnection or access to UNEs also contains other functions that are not in themselves necessary for interconnection or access to UNEs, such multi-function equipment should continue to be eligible for interconnection under the necessary standard. As explained herein, as long as such integrated equipment contains functions that enable interconnection or access to UNEs, it is eligible for collocation notwithstanding that other functions are also integrated into the equipment.

Collocation of Multifunction Equipment May Be Required as a Reasonable Condition of Collocation Generally. The Act provides that ILECs must provide CLECs physical collocation

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of equipment necessary for interconnection or access to UNEs “on rates, terms, and conditions that are just, reasonable, and nondiscriminatory.” Thus, the Commission may require that ILECs permit collocation of multifunction equipment on the basis that it is a reasonable condition of providing collocation generally, regardless of whether the Commission could require collocation of this equipment on the independent ground that the equipment enables interconnection and access to UNEs. Collocation of multifunction equipment greatly promotes the goals of the Act, and, moreover, does not increase the physical occupation of ILEC premises at all or to any significant extent. This multi-function equipment fits inside collocation space that many CLECs have already obtained, built out, and paid for.

Inter-CLEC Cross-Connection Must Be Permitted. Further, the Commission may, and should, reestablish the requirement that ILECs permit CLECs to perform their own cross-connects with other CLECs on ILEC premises. The Commission should interpret the statute to encompass interconnection with other CLECs, not just with the ILEC. By definition, CLECs must cross-connect with other CLECs in order to interconnect with them, and, therefore, may do so as part of collocation on ILEC premises. Moreover, it would create formidable practical and economic barriers to competition to require the CLECs to provision their own cross-connections only outside of ILEC central offices. A competitive market inherently involves direct relationships between CLECs, and CLECs must have parity with the ILEC in terms of ability to interconnect with CLECs. Absent this ability to form strategic alliances with other CLECs, and direct physical interconnection, competition will be seriously harmed. Further, as with collocation of multifunction equipment, the Commission may require ILECs to permit CLEC self-provisioned cross-connection as a reasonable condition of offering collocation. Any



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additional physical occupation of ILEC premises is trivial, and CLEC cross-connection greatly facilitates achievement of the pro-competitive goals of the Act.

UNE Rules Must Be Updated in Light of Deployment of Next Generation Architecture.

This proceeding also presents an important opportunity for the Commission to lay the groundwork for local competition as ILECs deploy next generation and beyond network architectures. The Commission should define loop and transport facilities as encompassing advanced services equipment. The Commission's previous exclusion essentially of any ILEC equipment that was used in provision of advanced services, even if used for other services, is too broad. As the Project Pronto experience has shown, this approach is unworkable for a variety of reasons, including that it is not always a practical alternative for CLECs to collocate their own advanced services equipment either in the central office or at remote terminals. While CLECs should be able to obtain loop and transport facilities as UNEs apart from advanced services equipment, the functionalities of this equipment must also be offered as UNEs. Mpower submits with, and as part of, these comments an additional white paper that provides an analytical framework for, and that will facilitate, identification of new unbundled network elements that should be offered as new UNEs.

New Fiber UNEs Should Be Established. The Commission should make clear that an ILEC's obligation to offer all of the features, functions, and capabilities of the network as UNEs fully applies to new optical loops and network facilities. At a minimum, as explained herein, the Commission should require ILECs to offer as UNEs optical wavelengths, virtual paths between the central office and the customer's premises, channelized fiber UNEs based on time division multiplexing, a broadband fiber UNE, and an NGDLC aggregation UNE.

Network Capabilities Must Be Fully Disclosed. However, CLECs are at a disadvantage in identifying new network capabilities that should be offered as UNEs because ILECs are not fully disclosing what those capabilities are. Current network disclosure rules essentially require only disclosure of the capabilities the ILEC unilaterally plans to deploy, not the full capabilities of new network equipment. ILECs must be required to disclose this information, including any manufacturer proprietary information, subject to non-disclosure agreements if necessary. The Commission should also require that ILECs make reasonable upgrades of equipment that will provide beneficial new network capabilities that could be offered as UNEs.

Access to Copper Loops Must Be Maintained. The Commission should also require ILECs to maintain, and offer as UNEs, copper loops this is safeguard to assure that CLECs may provide the current full range of advanced services.

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matters of	)	
	)	
Deployment of Wireline Services Offering	)	CC Docket No. 98-147
Advanced Telecommunications Capability	)	
	)	
and	)	
	)	
Implementation of the Local Competition	)	CC Docket No. 96-98
Provisions of the	)	
Telecommunications Act of 1996	)	

**COMMENTS OF  
MPOWER COMMUNICATIONS CORP.**

Mpower Communications Corp. ("Mpower") submits these comments in response to the Commission's notices of proposed rulemaking<sup>1</sup> in the above-captioned proceedings concerning issues raised on remand<sup>2</sup> of the *Collocation Order*<sup>3</sup> and concerning the need for revision of the

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<sup>1</sup> In the Matters of Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket Nos. 98-147, 96-98, Order on Reconsideration and Second Further Notice of Proposed Rulemaking in CC Docket No. 98-147, and Fifth Further Notice of Proposed Rulemaking in CC Docket No. 96-98, FCC 00-297 (August 10, 2000) ("*Collocation Reconsideration Order and NPRM*").

<sup>2</sup> *GTE Service Corp v. FCC*, 205 F.3d 416 (D.C. Cir. 2000) ("*GTE v. FCC*").

<sup>3</sup> Deployment of Wireline Services Offering Advanced Telecommunications Capability, First Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 98-147, 14 FCC Rcd 4761 (1999) ("*Collocation Order*"), *aff'd in part and remanded in part sub. nom. GTE v. FCC*, *supra*.

Commission's local competition rules in light of deployment of next generation network

architecture by incumbent local exchange carriers ("ILECs").

**I. ISSUES IN THIS PROCEEDING SHOULD BE RESOLVED IN WAYS THAT  
WILL PROMOTE ACHIEVEMENT OF THE OVERARCHING PRO-  
COMPETITIVE GOALS OF THE ACT**

In the Telecommunications Act of 1996, Congress sought to "provide for a pro-competitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all telecommunications markets to competition."<sup>4</sup> In evaluating issues in this proceeding, the Commission must be guided by this overarching goal of promoting competition in local telecommunications service markets. While some ILECs will undoubtedly urge adoption of a narrow reading of their obligations under the Act, for the reasons explained below, the Commission may reestablish regulations governing collocation in ILEC central offices that permit collocation of a full range of contemporary telecommunications equipment consistent with the Act. The Commission may also establish rules governing new issues relating to next generation network architectures that promote the pro-competitive goals of the Act:

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<sup>4</sup> S. CONF. REP. No. 104-230, at 1 (1996). *See also Iowa Utils Bd. v. FCC*, 120 F.3d 753, 791 (8th Cir. 1997) (stating that Congress passed the 1996 Act, in part, "to erode the monopolistic nature of the telephone industry by obligating [ILECs] to facilitate the entry of competing companies into local telephone service").

**II. THE COMMISSION SHOULD ESTABLISH A MORE FAR REACHING  
IMPLEMENTATION OF THE STATUTORY REQUIREMENT OF  
NONDISCRIMINATORY OFFERING OF COLLOCATION**

**A. The Commission Has Sweeping Authority to Implement Complete Parity  
Between ILECs and CLECs Concerning Access to ILEC Central Offices**

Section 251(c)(6) of the Act requires ILECs to provide for “physical collocation of equipment necessary for interconnection or access to unbundled network elements on rates, terms, and conditions that are just, reasonable, and nondiscriminatory.”<sup>5</sup> So far, under the 1996 Act, the Commission has not elected to fully exercise its authority under Section 251(c)(6) to require ILECs to offer collocation on reasonable terms and conditions and to assure nondiscriminatory physical collocation in ILEC central offices. The Commission has authority to require absolute competitive parity between ILECs and CLECs with respect to occupation and use of ILEC central offices and remote terminals. In fact, it would be hard to overstate the breadth of the Commission’s authority to prescribe reasonable terms and conditions for collocation and to prevent undue discrimination by ILECs against CLECs in providing collocation of equipment deemed “necessary” for interconnection or access to UNEs.

The basic regulatory standard of reasonableness and nondiscrimination is an essential feature of virtually all federal regulatory statutes, including the Interstate Commerce Act (“ICA”),<sup>6</sup> the Natural Gas Act,<sup>7</sup> and the Federal Power Act,<sup>8</sup> as well as the Communications Act.

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<sup>5</sup> 47 U.S.C. Section 251(c) (6).

<sup>6</sup> 49 U.S.C. §§ 2, 3(1) (1977).

<sup>7</sup> 15 U.S.C. §§ 717 *et seq.*

<sup>8</sup> 16 U.S.C. §§ 824.

The Courts have observed repeatedly that the all-embracing statutory proscription against “undue” or “unreasonable” discrimination comprehends *every* form of unreasonable discrimination within the power of Congress to condemn.<sup>9</sup> It is said that the purpose of Congress in adopting such language was “to cut up by the roots *every* form of discrimination, favoritism and inequality.”<sup>10</sup> Indeed, under Section 202(a) of the Telecommunications Act of 1934, not only have the courts upheld this Commission’s broad authority to define the scope of discrimination deemed unreasonable, but also the courts have affirmed this Commission’s authority to fashion remedies, either retrospectively through injunction, or prospectively through the Commission’s authority to prescribe just and reasonable terms and conditions of service.<sup>11</sup>

Such generic antidiscrimination provisions have justified agency action *far* more sweeping than merely establishing rules requiring nondiscrimination in the provision of collocation space. It was almost 15 years ago that the Federal Energy Regulatory Commission (“FERC”) issued Order No. 436,<sup>12</sup> completely restructuring the natural gas industry, based *solely* on FERC’s longstanding authority to prevent “undue” discrimination under Section 5 of the

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<sup>9</sup> See, e.g., *Merchants Warehouse Co. v. United States*, 283 U.S. 501, 512 (501); *Louisville & Nashville R.R. Co. v. United States*, 282 U.S. 740, 749-750 (1931).

<sup>10</sup> See, e.g., *Louisville & Nashville R.R. Co. v. Mottley*, 219 U.S. 467, 478 (1911) (emphasis added).

<sup>11</sup> See, e.g., *National Association of Motor Bus Owners v. FCC*, 460 F.2d 561, 565 (D.C. Cir. 1974).

<sup>12</sup> 50 Fed. Reg. 42,408 (1985).

Natural Gas Act (“NGA”).<sup>13</sup> The centerpiece of Order No. 436 was the imposition of “open access” requirements on vertically integrated, producer-owned or affiliated pipelines, eliminating overnight an industry structure (*i.e.*, bundled commodity sales and transportation service) that had long been fostered under the NGA.<sup>14</sup> Reversing decades of regulatory policy, the FERC required gas pipelines *for the first time* to act as common carriers, transporting gas for third party shippers on the same terms and conditions that they applied to themselves. Acknowledging that the NGA imposed no explicit “common carrier” obligation on pipelines – in contrast to railroads or telecommunications carriers, the court nonetheless upheld the open access requirement, noting that “the Act fairly bristles with concern for undue discrimination.”<sup>15</sup> The court again sustained an even more sweeping restructuring of the electric industry just last month based on a broad interpretation of the similar antidiscrimination provisions of the Federal Power Act (“FPA”)<sup>16</sup> including the imposition of an *involuntary* retail wheeling obligation on all public utilities with transmission facilities.<sup>17</sup>

Where, as under the 1996 Act, the Commission’s authority to prevent discrimination by ILECs is considerably broader than that conferred under the other statutory schemes discussed

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<sup>13</sup> 15 U.S.C. §717(d); *see Associated Gas Distributors v. FERC*, 824 F.2d 981, 998 (D.C. Cir. 1986).

<sup>14</sup> Specifically, as in the case of the local exchange carriers, interstate gas pipelines transported gas primarily for their affiliates, whether produced by those affiliates or purchased at regulated prices. *Id.*

<sup>15</sup> *Id.* at 998.

<sup>16</sup> 16 U.S.C. § 824d-e.

above (*including* Section 202(a) of the 1934 Act), there can be little doubt of the FCC's authority to adopt reasonable collocation rules.<sup>18</sup> First, as this Commission has recognized, the prohibition against discrimination that appears throughout Section 251 is unqualified and absolute; unlike the statutes discussed above, Section 251 does not qualify the term "nondiscriminatory" with the words "undue" or "unjust and unreasonable."<sup>19</sup> Second, by requiring ILECs to provide interconnection to their competitors, the Act creates an opportunity as well as an incentive "for the LEC to discriminate against its competitors by providing them with less favorable terms and conditions of interconnection than it provides itself."<sup>20</sup> That manifest incentive warrants full enforcement of the strict prohibition on discrimination comprehended in the statutory language of Section 251. Accordingly, in interpreting the prohibition on discrimination under Section 251, the Commission stated that:

We believe that the term 'nondiscriminatory,' *as used throughout section 251*, applies to the terms and conditions an incumbent LEC imposes on third parties as well as on itself. In any event, by providing interconnection to a competitor in a manner less efficient than an incumbent LEC provides itself, the incumbent LEC violates the duty to be "just" and "reasonable" under section 251(c)(2)(D).<sup>21</sup>

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<sup>17</sup> See *Transmission Access Policy Study Group v. FERC*, 2000 WL 762706 (D.C. Cir.)

<sup>18</sup> See *In the Matter of the Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, FCC 96-325, First Report and Order, 11 FCC Rcd. at 15499 at ¶ 218 (1996) ("*Local Competition Order*").

<sup>19</sup> *Id.*

<sup>20</sup> *Id.*

<sup>21</sup> *Id.* (emphasis added).



This interpretation of nondiscriminatory applies equally to collocation deemed “necessary” under Section 251(c)(6) as it does to all the other various obligations imposed on ILECs under Section 251©.<sup>22</sup>

**B. The Commission Should Prescribe Collocation Standards that Place the CLECs at Competitive Parity with ILECs**

In accordance with its comprehensive authority to assure reasonable and nondiscriminatory physical collocation in ILEC central offices, the Commission in this proceeding should establish rules governing the terms and conditions for collocation that will achieve complete competitive parity between the ILECs and their CLEC customers. In formulating these requirements, the Commission should take as its lodestar the statutory mandate under Section 251(c)(6) that the terms and conditions for collocation be reasonable and nondiscriminatory. The Commission should establish rules that provide that CLECs have the same rights to collocate in ILEC central offices and remote terminals in terms of access to, and price, occupation and use of, space as are enjoyed by ILECs. The statutory requirement that ILECs provide physical collocation can mean no less. In subsequent sections of these comments, Mpower suggests specific rule changes that will achieve this overall statutory mandate.

**III. THE COMMISSION SHOULD REESTABLISH AND STRENGTHEN RULES GOVERNING COLLOCATION IN ILEC CENTRAL OFFICES**

**A. The Statute Permits Collocation Of A Full Range of Telecommunications**

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<sup>22</sup> Of course, the nondiscrimination obligation applicable to ILECs under Section 251 (c) of the Act in no way requires that ILECs and CLECs be subject to symmetrical regulation. As long as ILECs possess market power in the provision of local telecommunication services, and CLECs do not, there will be a need for a significantly greater degree of regulatory oversight over, and imposition of special regulatory provisions on, ILECs. The Act itself recognizes this in imposing the market opening obligations of Section 251 (c) only on ILECs.

## **Equipment**

### **1. “Necessary” Means “Necessary for Effective Competition”**

As noted, Congress intends the Commission to “provide for a pro-competitive, de-regulatory national policy framework designed to rapidly accelerate private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all telecommunications markets to competition.”<sup>23</sup> In establishing collocation rules, the Commission should keep in mind this overarching pro-competitive goal of the 1996 Act. The Commission should view the “necessary” standard of Section 252(c)(6) of the Act as coextensive with the ILEC’s obligations to provide interconnection and access to UNEs on just and reasonable and nondiscriminatory terms and conditions under Sections 251(c)(2)-(3). This approach will best achieve the goals of the 1996 Act.

### **2. “Interconnection” and “Access to UNEs” Should be Broadly Defined**

The Commission should broadly define interconnection and access to UNEs. Specifically, so called packet-switches and other equipment that interact with or receive packetized data are integral to interconnection and, therefore, necessary under the statutory test and eligible for collocation even on a stand-alone basis.

An analogy to transportation is useful here. In simple terms, interconnection is an intersection between two networks allowing information to flow from one network to the other, while switching is a way of routing that directs the information through the intersection towards its ultimate destination. In common parlance, an intersection may perform routing functions

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<sup>23</sup> S. CONF. REP. No. 104-230, at 1 (1996), *supra*.

without losing its character as an “intersection.” For example, the exit ramps on freeway intersections typically perform a routing function, separating the traffic flow according to the directions to be followed on the intersecting freeway. In addition, exit ramps frequently have two or more lanes that further separate the traffic according to ultimate destination. Even though the ramps integrate the routing function and the intersection function, it is accurate as a matter of common usage - to describe the ramps as part of the freeway “intersection.” The ramps may also be described accurately as “necessary” for the intersection. While it might be technically possible to build an old-fashioned highway intersection, if a system of ramps is more efficient, it is consistent with common usage to consider the ramps as part of the “intersection” and as “necessary” for the intersection, even though they integrate the routing and the intersection functions.

The Commission must recognize that the telecommunications industry is in the midst of a fundamental shift in telecommunications: the amount of data traffic on public and private networks exceeds the amount of voice traffic. Although this data traffic is generally carried across circuits originally designed to support channels of voice traffic, these connections are now being used in an unchannelized format to create aggregate pipes that connect together intelligent nodes capable of directing vast quantities of tiny bundles of data known as packets.

The two major technologies used to construct networks today reflect the contrast between the new and old approaches to delivering information: Circuit Switched and Packet Switched networks. While these approaches include common components such as transport and termination, they also have a number of fundamental differences. The Circuit Switched model used for building networks over the last three decades was based upon TDM (Time Division

Multiplexing) techniques. This system uses circuits aggregating multiple 64Kbps channels to maintain end-to-end connections between two locations in the network. These channels are intelligently established between large digital switches commonly referred to as Class 5 (for local calls) or Class 4 (for long distance calls).

All TDM switches were designed around the principle of taking an incoming channel and connecting it to an appropriate outgoing channel to complete a dedicated, end-to-end circuit for the duration of the call. Today this happens much faster with the addition of control protocols such as SS7, but is relatively slow in comparison with packet based traffic, especially when a number of circuit switches are involved. Packet Switching, however, represents a more efficient paradigm for communicating information. Instead of carving out a series of channels from one end of a circuit to another, no dedicated pathway is used. Instead, information is packetized with each packet containing instructions for reaching its destination. If the packets are used to carry voice data, it is entirely possible that the path taken between the two points may change one or more times during a conversation, or session providing an efficient fault tolerant exchange of information.

Devices used in data networks are often referred to as routers or switches. In data networking both terms refer to a device that actively monitors each chunk of traffic (packets), and chooses the most appropriate pathway given current conditions in the network. Although functionally equivalent in the network, switches often process information at a lower level than routers, and are generally comprised of dedicated optimized hardware. Routers, likewise, are referred to as computers that laboriously analyze each packet before choosing the next "hop" for that information. The dominant protocols in data networking, ATM (Asynchronous Transfer

Mode) and IP (Internet Packet), allow for this type of intelligent processing very rapidly with great flexibility with respect to the origination and destination of data traffic. Both routers and switches using ATM or IP provide a method of redirecting these small packets at each junction in their path, whereas circuit switches are unaware of the information flow in use, or of the capacity or state of the network in general after establishing the circuit.

In short, as the contemporary telecommunications market becomes characterized by packetized data traffic, there is no meaningful distinction between interconnection and routing functions, especially in equipment that is no more than data processing equipment that receives and processes data streams according to directions from software resident in the equipment. As described, while circuit switching equipment establishes connections between circuits, and opens and closes circuits like switching between railroad tracks, packet “switches” at most determine what routes on unbundled data packets should take over circuits, usually over unswitched circuits dedicated to ISPs or other data communications customers. This function is integral to the exchange of packetized information. Accordingly, equipment such as ATM switches and routers are in themselves necessary for interconnection under the statutory standard whether they are viewed as integrated with other functions or not. It is worth noting that the OCD device that SBC plans to employ in connection with its “Project Pronto” is essentially an ATM “switch.” As a result, it is necessary that CLECs use an ATM device in order to interconnect with these OCDs. Therefore, CLECs are entitled to collocate such devices.

The Commission should also define access to UNEs as encompassing any interaction with the features, functions, and capabilities of UNEs. The Act defines network elements as

including their “features, functions, and capabilities.”<sup>24</sup> In order to access those functionalities, CLECs must employ equipment that is capable of interacting with those features, functions, and capabilities. Therefore, any such equipment meets the statutory “necessary” test because it enables CLECs to access those features, functions, and capabilities of the UNEs. As ILECs employ more advanced electronics in loops and central offices, the range of equipment that CLECs may collocate correspondingly increases. Fundamentally, ILECs are now increasingly deploying data equipment and optical systems as part of loops and other UNEs. As described elsewhere in these comments, the Commission should also designate new UNEs related to ILECs’ deployment of next generation network architectures. As a general matter, however, The Commission should determine that any equipment that interacts with any of the capabilities of these UNEs is necessary for access to UNEs.

**3. The “Necessary” Standard Adopted in the UNE Remand Order Is Too Restrictive**

In the *Collocation Reconsideration Order and NPRM*, the Commission asked for comment on whether it should adopt the definition of necessary that it employed in the *UNE Remand Order* concerning access to proprietary network elements.<sup>25</sup> In the *UNE Remand Order*, the Commission defined necessary as “if taking into consideration the availability of alternative elements outside the incumbent’s network . . . lack of access to that element would . . . preclude a requesting carrier from providing the services it seeks to offer.”<sup>26</sup> This definition is too

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<sup>24</sup> 47 U.S.C. Section 3(29).

<sup>25</sup> *Collocation Reconsideration Order and NPRM*, para 75.

<sup>26</sup> *UNE Remand Order*, para 44.

restrictive in that only if omission of a piece of equipment would preclude provision of a service could the collocation of the equipment be deemed “necessary.” Instead, as discussed, “necessary” should be defined to permit collocation of equipment that enables competitive interconnection or access to UNEs under Sections 251(c)(2)(1), thereby enabling the CLEC to provide the full range of telecommunications offerings. Moreover, there is no need for the Commission to employ with respect to UNEs the definition of “necessary” used for determining eligibility for collocation that it applied to proprietary UNE since the necessary standard for access to proprietary UNEs was intended to afford some protection to proprietary information. This is not a consideration with respect to collocation of equipment by CLECs on ILEC premises and, therefore, there is no need to assume that Congress intended the same restrictive definition to apply. In any event, inability to collocate equipment that enables interconnection or access to UNEs would preclude CLECs’ ability to provide service on a competitive basis.

**B. Any Commercially Available Equipment that Enables Interconnection or Access to UNEs Meets the “Necessary” Test**

The Commission should determine that equipment that enables interconnection or access to UNEs meets the “necessary” test. Indisputably, in order to obtain interconnection or access to UNEs, CLECs must use such equipment. In the words of the D.C. Circuit, such equipment is “indispensable”<sup>27</sup> for , or, alternatively “directly related to”<sup>28</sup> interconnection or access to UNEs because without such equipment, CLECs may do neither. Therefore, such equipment meets the statutory test of necessary for interconnection or access to UNEs because it enables

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<sup>27</sup> *GTE v. FCC*, 205 F.3d at 424.

interconnection and access to UNEs by virtue of capabilities and functions that make possible such interconnection or access.

There are numerous products on the market that have such capabilities and that enable interconnection or access to UNEs. The only issue, therefore, is what items may be collocated from among the total set of equipment that enables interconnection or access to UNEs. The Commission should reject any ILEC requests to narrowly define the types of equipment that enable interconnection or access to UNEs. Instead, as a practical matter, the only test that the Commission could administer is to let the marketplace determine the equipment that enables interconnection or access to UNEs. In other words, if the equipment is commercially available and it enables interconnection or access to UNEs, it may be collocated. Absent reliance on the marketplace to define what equipment may be used for interconnection or to access the UNEs, the Commission could potentially become involved in detailed examination and virtual design of telecommunications equipment. Further, allowing the marketplace to define what equipment enables interconnection or access to UNEs will assure that ILECs are not able to use equipment classifications,<sup>29</sup> evaluations and testing as another tool for delaying competition. Therefore, the

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<sup>28</sup> *Id.*

<sup>29</sup> Some ILECs are currently attempting to classify cutting-edge equipment used in data communications as switching equipment in an attempt to exclude it from eligibility for collocation and disadvantage competitors. An inability of CLECs to collocate the most advanced and efficient equipment, even as ILECs themselves deploy it, would cause serious competitive harm to CLECs. As explained, however, the functionality of this equipment is integral to interconnection and access to UNEs and, therefore, eligible for interconnection under the statute.